





#### **CHULA VISTA FIRE DEPARTMENT**

ANNUAL REPORT 2019



### WELCOME TO THE CHULA VISTA FIRE DEPARTMENT

With respect to public safety, the Chula Vista Fire Department is obligated to analyze how, where, and when improvements should be made. The Fire Department is fulfilling its obligation to improve public safety by conveying recommendations to City Council which have recently culminated into service enhancements. These enhancements include the improvement to 4.0 staffing, implementation of Strategic Quick Unit Apparatus Deployment (SQUADs), fire station relocation and replacement, apparatus and equipment purchases and replacement policies, annual life safety inspections of apartment buildings; along with acceptance and approval of the addendum to the Fire Facility and Equipment Deployment Master Plan which defines our response thresholds.



Take a look inside our first ever annual report and see how we have transformed into reality our plans for improved service, better equipment, better training, and faster response times - in 2019. The best part is we are committed to continuing our plans for additional improvements that will better serve all our communities in Chula Vista.

As we enter our 100<sup>th</sup> year of service, the members of the Chula Vista Fire Department continue to provide quality care and service. We are eager to serve; we are well trained; we are ready to respond at a moment's notice regardless of time or day;



we are known for providing added value and service; we are professional; we are here to put others first; we are "People who care about people."

Thank you for your continued support!

Jim Geering Fire Chief

"People who care about people"

#### How to get in touch with us...

Main Line: (619) 691-5055

Website: https://www.chulavistaca.gov/

departments/fire-department

Prevention (619) 691-5029

Email: mzepeda@chulavistaca.gov

#### **Station Tours**

Website: <a href="https://www.chulavistaca.gov/departments/fire-department/stations-locations/station-tours">https://www.chulavistaca.gov/department/stations-department/stations-locations/station-tours</a>

Records Request: Clerk's Office (619) 691-5041

Website: <a href="https://www.chulavistaca.gov/departments/city-clerk/public-records">https://www.chulavistaca.gov/departments/city-clerk/public-records</a>

#### In the United States:

- Firefighters per capita range from 1.54 to 1.81 (per 1,000 people)
- There are more than 72,100 pumpers, 7,400 aerial apparatus, 80,900 other suppression vehicles

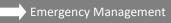
For protected cities or jurisdictions with populations from 250,000 to 499,999 (Chula Vista population 275,000):

- Firefighters per capita ranged from 0.49 to 2.57 with a median of 1.12 (CVFD is 0.46)
- Firefighters per capita by region: Northeast 2.28, Midwest 1.33, South 1.33, West 0.86
- Apparatus per capita US: engines 0.06 (CVFD is 0.05), aerial apparatus 0.01 (CVFD is 0.01), fire stations 0.06 (CVFD is 0.036)
- Percentage of Fire Stations in U.S. Fire Departments: 6-9 stations 5%, 10-19 stations 50%, 20-29 stations 34%, 30 or more stations 11% (CVFD has 9 fire stations)
- FDs providing EMS: No EMS 2%, BLS 27%, ALS 72%

From NFPA: Fire Department Profile 2018, February 2020

What's Inside:







Training







#### **ADMINISTRATION**

# SINCE 1921 OFFICE AUTOFICIAL VISTA

#### **Budget**

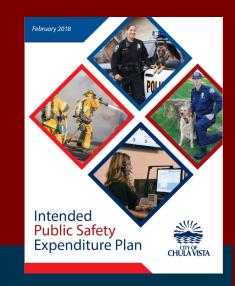
Expenses FY 2019	Budgeted	Actual
Fire Department Expenses	\$31,436,470	\$32,536,961
First Responder Advanced Life Support Program Expenses	\$1,702,000	\$1,573,578
Fire Department Measure A Expenditures	\$4,340,329	\$2,233,197
Fire Department Total Expenses	\$37,478,799	\$36,343,736

#### Revenues FY 2019

Licenses and Permits	\$575,182
Use Money/Property	-\$6,731
Other Agency Revenue	\$619,523
Charges for Services	\$799,452
Other Revenue	\$2,402,962
Transfers In	\$1,875,104
Total Revenues	\$6,265,492

#### Staffing

		Daily Suppression Sta	ff Daily Suppression
Sworn Staff		Per 24 Hour Shift	Staff with SQUADs
Fire Chief	1		
Deputy Fire Chief	2		
Division Chief	2		
Battalion Chief - Suppression	6	2	2
Battalion Chief - Administrative	1		
Fire Captain - Suppression	35	11	12
Fire Captain - Administrative	4		
Fire Engineer - Suppression	33	11	11
Fire Engineer - Administrative	1		
Firefighter/Paramedic	35	11	12
Firefighter/EMT	21	7	7
Sr. Fire Inspector/Investigator	2		
Fire Inspector/Investigator II	4		
Fire Inspector/Investigator I	3		
Total	150	42	44



Civilian Staff	
Administrative Secretary	1
Emergency Services Coordinator	1
Public Safety Analyst	1
Training Program Specialist	1
Sr. Office Specialist	1
Facility Supply Specialist	1
Multi Media Production Specialist	1
Fire Prevention Aide	1
Fire Inspector II/Investigator 1	0.5
Intern	0.5
Medical Director	1
Sr. Fiscal Office Specialist	1
Total Civilian	11

Volunteer Staff	
Fire Chaplain	1
CAST	49
CERT	35
Fire Explorers	20
Total Volunteer	105

Employees by Bargaining Group	
IAFF Member Positions	145
Association of Chula Vista Employees (ACE) positions	8
Unrepresented Professional and Mid Managers positions	3
Senior Managers	2
Executives	1
Not Represented	2
Fire Department Staff	
Daily Suppression Staff	42
Daily Squad Staff (12 hour shifts/ 2 shifts)	2
Daily Fire Prevention Staff	13
Daily Training Division Staff	4
Daily Logistical Support Staff	2
Daily EMS Support Staff	5
Total Clerical Staff	4
Total Support Staff (non-uniform) per Weekday	10
Total FD Non-suppression Staff Per Weekday	31
Total Staff Per Weekday Suppression & Non-Suppression	75
Total Fire Department Staff	161
Volunteer Total Staff	105
Fire Department Total Staff w/Volunteers	266
2019 Per Capita (126/275)	0.46
2019 Per Capita with SQUADs (132/275)	0.48

#### 3 **ADMINISTRATION** CITY OF CHULA VISTA Engineer Fire Explorer Program 2- FF/Paramedic 2- Fire Captain SQUAD 11-B FF/Paramedics 11-C FF/Paramedics 11-AFF/Paramedics 11-A Fire Engineers 11-B Fire Engineers 11-C Fire Engineers 7-A Firefighters 7-B Firefighters 7-C Firefighters 11-A Fire Captains 11-C Fire Captains 11-B Fire Captains Multi-Media Production Specialist Prevention Aide 5 Fire Inspector II /Investigator Fire Inspector /Investigator Investigator/ Investigator .5 Intern 1 Fire .5 Fire Investigator Fire Department Executive Staff Members Fire Department Senior Staff Members Fire Chaplain CERT Volunteer Personnel Civilian Personnel **Sworn Personnel** CAST

Training Captain

Training Program Specialist

**Battalion Chief** 

Director of Operations **Deputy Fire Chief** 

Office of Communications

**Division Fire Chief** Director of EMS

**Division Fire Chief** 

Fire Marshal

**Director of Administration** 

Deputy Fire Chief

Captain

Administrative Secretary

FIRE CHIEF

2-A Battalion Chiefs 2-B Battalion Chiefs 2-C Battalion Chiefs

> Public Safety Analyst

> > **Medical Director**

Sr Office Specialist

Services Coordinator Emergency

Support Services

Captain

Captain EMS

2 Senior Fire

Inspector/

Facility Supply Specialist

Sr Fiscal Office Specialist

Training

# 2019 CHULA VISTA FIRE DEPARTMENT ORGANIZATION CHART

#### **ADMINISTRATION**

#### **Capital Projects & Improvements**

#### **Millenia Fire Station 10**

- PFDIF Funded
- Estimated completion in May 2020 at \$8.1 Million
- 13,435 sq. ft. with three bays
- Two-story station includes pole and high speed roll-up doors
- To serve the areas of Millenia and Otay Ranch
- EC Constructors Inc and JKA Architecture





# Station 10 Groundbreaking

#### Fire Station 5 & 9 (Relocation & Re-build)

The necessary rebuilds created the opportunity to provide an improvement to our response network. Response modeling software called AD-AM (apparatus deployment analysis module) utilized historic CAD data, GIS map data and a projection algorithm which generated the potential positive impact on response times as a result of adding unit/stations and relocating apparatus. According to the modeling analysis, the entire service delivery network will see response time improvements.

- Stations are over 60 years old
- Funded by Measure P
- Fire station 5 (391 Oxford) will be relocated/rebuilt on the east side of the South Library
- Fire station 9 (366 E. Oneida) will be relocated/rebuilt at the intersection of Naples/Moss

#### <u>Apparatus</u>

#### Funded by Measure P

- One new Pierce Urban Search and Rescue (USAR53)
- Two new Pierce Arrow XT Triple Combination Pumpers (Engine 52 & 54)
- One new Boise Mobile Equipment brush engine (Brush 56)

#### **Funded by PFDIF**

 One new Pierce Arrow XT Tripple Combination Pumper (Engine 60)



#### Staff Vehicles

#### Funded by Measure P

Reconfiguration and enhancement of Prevention fleet vehicles:

- Two new Investigation Trucks
- Nine new Electric vehicles

Two replacement staff vehicles, assigned to:

- Fire Chief
- Division Chief, Director of Fire Prevention



Three new vehicles, assigned to 3 newly created Measure A staff positions:

- Deputy Fire Chief, Director of Administration
- Division Chief, Director of EMS
- Public Education Media Services Captain



#### **EMERGENCY MEDICAL SERVICES**

#### **EMS Incident Type (CAD)**

CAD Incident Type		%
Sick Person (Specific Dx)		17.40%
Falls / Back Inj (Trauma)		11.12%
Breathing Problems		10.32%
Chest Pain		8.34%
Unc/Fainting (Non Trauma)		8.16%
Traffic Accident		6.20%
Convulsions / Seizures		4.41%
Hemorrhage / Lacerations		3.24%
Traumatic Injuries, Spec		3.15%
Assault/Rape		3.13%
Abdominal Pain/Problems		3.12%
Stroke		2.87%
Diabetic Problems		2.07%
Psych / Suicide Attempt		2.05%
Heart Problems		1.83%
OD/Ingestion/Poisonings		1.82%
Cardiac / Respiratory Arrest		1.67%
Unknown Problem (Man Dov	vn)	1.50%
Medical Alert Alarm		1.31%
Allergy/Hives/Med Rx/Stng		1.12%
Back Pain (Non Traumatic)		1.10%
CV Medical Aid		1.02%
Headache		0.95%
Choking		0.53%
Preg/Birth/Miscarriage		0.43%
Stabbing/Gunshot		0.35%
Animal Bites/ Attacks		0.14%
Medical Aid		0.14%
Eye Problems / Injuries		0.12%
Vehicle vs. Pedestrian		0.12%
Heat / Cold Exposure		0.09%
Burns / Explosion		0.06%
C O / Inhalation/ Haz Mat		0.03%
Drowning/Diving Accident		0.03%
Electrocution		0.03%
POISON CONTROL		0.03%
	Total	100.00%



#### How does the Emergency Medical Services (EMS) system work?

0:05:47

0:09:44

The EMS system is a combination of 911 dispatchers who try to match your health needs with the correct resources. Resources include, a first responder system capable of rapid response for those needing immediate help, and a transport system that can respond in a reasonable amount of time throughout the day. The CVFD EMS system is currently a combination of Fire Department first responders and contracted American Medical Response (AMR) transport units. The first responder units have 2-3 times the number of resources that the transport system does, which allows a rapid response throughout the city to medical emergencies. First responder units arrive quickly to begin patient assessment and to initiate medical care and advanced life support if necessary. Transport units may arrive before, during, or after that to provide medical care and transport. The medical team will provide initial care, as well as determining if you need any specific medical care at one of our local trauma, stroke, or cardiac centers. Unless you have one of these special needs it is customary to transport to the hospital of choice.

#### **Educational Links**

#### **Stroke Awareness and Prevention**

https://www.cdc.gov/stroke/healthy\_living.htm https://www.stroke.org/en/about-stroke

#### **Heart Disease**

https://www.cdc.gov/heartdisease/index.htm

https://www.heart.org/en/health-topics/consumer-healthcare/what-is-cardiovascular-disease

**CVFD** 

**AMR** 

0:05:08

0:09:32

#### **Trauma/Injury Prevention**

https://health.ucsd.edu/specialties/surgery/trauma-burn/trauma-prevention/Pages/default.aspx https://www.rchsd.org/programs-services/trauma-center/injury-prevention/



#### **EMERGENCY MANAGEMENT**

#### **EOC Activations**

The City's Emergency Operations Center is activated in support of any large scale emergency in the city. The EOC serves to support first responders, coordinate operations, and provide public information.

The EOC was activated for the following storms in 2019:

- ⇒ January 11-13 (EOC Monitoring)
- ⇒ January 14 (EOC Level 3)
- ⇒ January 15-17 (EOC Monitoring)
- ⇒ January 31—February 5 (EOC Level 3)
- ⇒ November 27-29 (EOC Level 3)
- ⇒ Deceber 4 (EOC Monitoring)
- ⇒ December 22-30 (EOC Monitoring)

#### **Protest Response**

The City EOC was activated on September 10, 2019 at a Level 3 to assist the Chula Vista Police Department during a protest at the Civic Center Library. The EOC was responsible for developing the incident action plan and coordinating internal and external resources.

#### **Emergency Shelter**

The City of Chula Vista, in partnership with the American Red Cross, established an evacuation shelter at Otay Recreation Center to house residents displaced by a local apartment fire. The City of Chula Vista Fire Department, Recreation Department, Public Works Department, Animal Care Facility and the Police Department coordinated to operate the emergency shelter for three days. Through the partnership with the Red Cross, residents were provided with meals and case management to assist them with resources, including housing assistance.

#### **EOC Full Scale Exercise**

In November 2019, the EOC participated in a full-scale exercise addressing a mass casualty incident resulting from a complex coordinated terrorist attack.

EOC full-scale exercises are conducted on a bi-annual basis to provide training opportunities for the City staff to be prepared for emergencies within the city.





#### **CERT**

The Community Emergency Response Team (CERT) carried out its mission through community involvement, trainings, and emergency response. CERT held three CERT Academies, conducted training and added over 30 new CERT members to the team

2019 CERT trainings amassed more than 4,300 total training hours among team members. Types of training included first responder awareness training, CERT National Conference, search and rescue training, amateur radio training and the San Diego County ERT Exercise.

Chula Vista CERT also held several community trainings/workshops. These included:

- ⇒ WUI ( Wildland Urban Interface)
- ⇒ MHFA (Mental Health First Aid)
- ⇒ Active Shooter + Stop the Bleed
- ⇒ FAME (First Aid, utility Meters, fire Extinguishers)

The CERT teams was also activated to support winter weather response. The CERT team was tasked with sandbag operations, which involved sandbag distribution and tracking. Sandbags were distributed to the public at various fire stations throughout the city.

If you are interested in joining Chula Vista CERT, please contact the CERT Program Manager (CERT@chulavistaca.gov).

#### FIRE PREVENTION

#### **Deliverables**

New Construction Plan Reviews completed within

established time frames: 98%

New Construction Plan Reviews completed: 1,053

New Construction inspections completed: 1,328

Hotel Motel inspections completed: 39

Hotel Motel violations: 12

Annual Fire Code inspections completed: 1178

Annual Fire Code violations: 727

School inspections completed: 1087

School violations: 758

FCIP inspections completed: 688

FCIP violations: 254





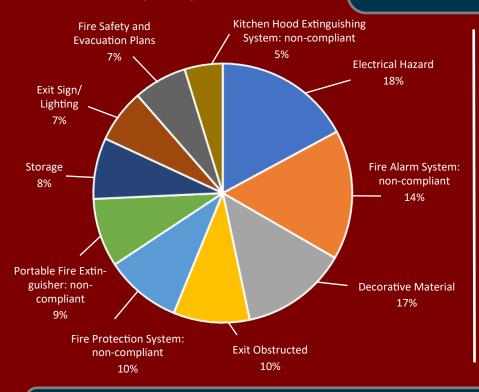
#### **Fire Investigations**

Unit responses 74

Ave. unit hours at scene



#### **Top 10 Inspection Violations**



#### Fire Ignition Source

The ignition source	
Determination	%
Electrical Arcing	17.2%
Flame/torch used for lighting	6.9%
Heat from direct flame, convection currents	3.4%
Heat from powered equipment, other	17.2%
Spark, ember, or flame from	
operating equipment	3.4%
Undetermined	51.7%

Division Chief, Fire Marshall Justin Gipson Sr Fire Inspector/Investigator Darin Golden Derek Olivas Fire Inspector II/Investigator Richard Gari Fernando Felix Maggie Greene Adam Beardsley Fire Inspector I/Investigator Justin Berkley Chris Smith Marshall Castro Sr Office Specialist Mariluz Zepeda

**OPERATIONS** 

Fire Operations consists of nine fire stations and 132 suppression firefighters. In 2019, CVFD responded to 22,700 incidents known as calls for service (CFS), increasing by six percent in recent years. On average there are sixty-two CFS per day spread amongst 12 staffed companies. Two engine companies have call volume over 4,000 each per year. Daily operations include a total of 44 professional firefighters per day staffing eight engine companies, two aerial ladder trucks, one Type I Urban Search & Rescue (USAR), one 12 hour squad, and two Battalion command vehicles.

#### 4-0 Staffing

With the improvement of 4-0 staffing beginning in 2019, emergency response units are more available and increasingly more reliable in terms of handling call volume. The improvement to 4-0 staffing has allowed the Fire Department to add approximately 140 hours of response capability into its network of emergency resources. In addition, our patients are spending less time at their own emergency.

#### **CVFD CFS—Changes by Year**

Calendar			Cum %
Year	Total	% Diff	Diff
2019	22,700	5.5	37.7
2018	21,514	0.3	32.2
2017	21,445	7.8	31.9
2016	19,892	4.7	24.1
2015	18,998	6.6	19.4
2014	17,825	8.8	12.8
2013	16,377	4.0	4.0
2012	15,742		

#### Calls For Service in Chula Vista

Includes responses by CVFD and neighboring Fire Departments.

Incident Type	Dispatch	% of Total
Fire	2,075	8.65
Structure	1,587	
Grass, Trash, Other	334	
Vehicle	154	
Overpressure Rupture	0	0
EMS	20,739	86.48
Rescue	233	0.97
Hazardous Conditions	397	1.66
Service Call	487	2.03
Incomplete	50	0.21
TOTAL	. 23,981	. 100



Vehicle Rescue/ Extrications

EMS	5
Rescues	16







Metrics:	Baseline*	2019	Threshold
Arrival of the first unit on scene to a medical emergency within seven minutes	80.3%	81.3%	90%
Initial Attack Force (one engine and four firefighters) in seven minutes	63.3%	76.5%	90%
Effective Response Force (fourteen firefighters) in 10 minutes	58.1%	84.5%	90%

<sup>\*</sup>Baseline (FY17) established prior to staffing improvements

**OPERATIONS** 

Units: E56, BR56 Incidents: 879

Station 8: 1180 Woods Dr

Station 6

Responses: 1,435 Incidents: 1,285 Units: E58

Units: B52, E57, T57 Incidents: 2,180

Station 3: 1410 Brandywine Ave

Responses: 1,902 Incidents: 1,453

Units: USAR53

Station 9: 266 East Oneida

Responses: 2,349 Incidents: 1,655

Units: E59

Incidents—The number of Calls for Service responded to within the station district.

Responses—The number of units responding to the incidents within the district. Some CFS require more than one unit to mitigate the emergency.

9

CITY OF CHULA VISTA

2019 ANNUAL REPORT

Station 2: 80 East J St

Units: E52, 0420

Units: B51, E51, T51 **Station 1**: 447 F St

Incidents: 6,710

Responses: 8,106

Responses: 2,013 Incidents: 1,916

Incidents: 1,523 Units: E54

Responses: 1,636

Station 4: 850 Paseo Ranchero

Station 6: 605 Mount Miguel Rd

Responses: 1,114

Station 8 2

Station 4

Station 2

Station 5: 391 Oxford St

Units: E55, BR55

Responses: 4,581

Incidents: 5,318

Station 7

Station 3

Station 5

Station 9

Station 7: 1640 Santa Venetia

Responses: 2,899

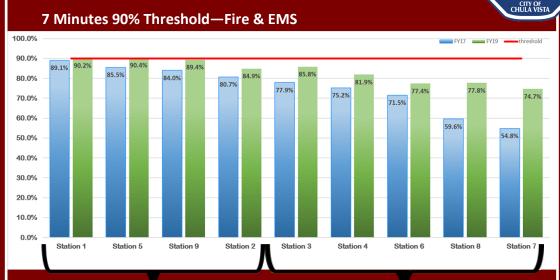
#### **OPERATIONS**

## SINCE 1921 DE SI

#### **Unit Responses:**

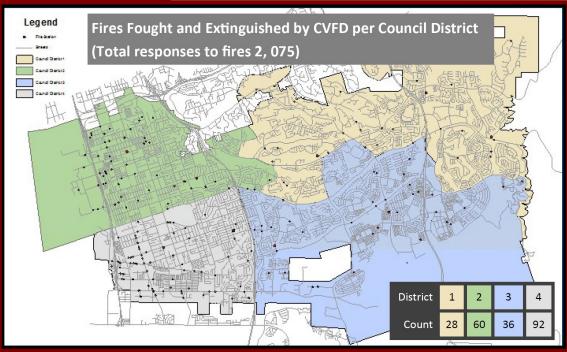
Multiple units may be requested on one CFS.

Unit	Daily Ave.	Monthly Ave.
CVB51	1.35	40.92
CVB52	0.78	23.75
CVBR55	0.02	0.67
CVBR56	0.04	1.08
CVE51	15.35	467.00
CVE52	5.52	167.75
CVE54	4.48	136.33
CVE55	12.53	381.08
CVE56	3.02	91.75
CVE57	5.81	176.75
CVE58	3.93	119.58
CVE59	6.44	195.75
CVSQ62	4.37	132.83
CVT51	5.51	167.58
CVT57	1.35	41.08
USAR53	5.21	158.50
Total	75.70	2302.42



WEST EAST

Shown in green, are the Response Time Improvements Made by Station



#### Strike Team

The Chula Vista Fire Department participates in the California Fire Assistance Agreement to support other jurisdictions in the local area and throughout California. In 2019, fire operations deployed 61 personnel to 16 incidents throughout California.

The Chula Vista Fire Department participates in the FEMA Urban Search and Rescue System to support other jurisdictions nationally. In 2019 fire operations deployed 3 personnel to 1 incident in the state of Florida.

Grants							
	Years	Time Frame	For	Award Value	Cost Share		
			4th FF on 4 engines				
FY2016 SAFER	3	Jan. 2018 - Jan. 2021	(Total 12 FF)	\$2.2 million (FEMA)	\$1.4 million from City		
			All FF trained/qualified				
FH2018 AFG	1	Sept. 2019 - Sept. 2020	to NWCG FF Type II	\$14,872 (FEMA)	\$1,487 from City		
			Engine 60 personnel				
FY2018 SAFER	3	Jan. 2020 - Jan. 2023	(12 FF)	\$3 million (FEMA)	\$1.8 million from City		
CAFED CA-ffine for Administration and Financian December 1							

SAFER - Staffing for Adeguate Fire and Emergency Response

AFG - Assistance to Firefighters

#### **Training Hours**

Rescue Systems 1

Rescue Systems 2

S-212 Chain Saw

Brute Force U.L.O.O.

Structural Collapse Technician/

Rescue Systems 2

JAC/SWC hours 41,486

Wellness Exercise hours 7,771 Total Training hours 49,257



**Department / Regional Course Offerings** 

April 29—May 3, 2019

September 30—Oct. 7, 2019

November 12-15, 2019

November 9, 2019

May 6-10, 2019

#### **Curriculum & Development**

#### **Mandatory In Service Trainings**

**Confined Space Refresher** 

**Driver Training** 

**Hazardous Materials** 

Wildland Safety Training RT130

#### **Mandatory Testing**

**Audiograms** 

TB / Phyiscials / Respirator Exams

Mask Fit Testing / SCBA Flow Testing

#### **Additional Testing**

Tiller Academy

4X4 Off Road

**Public Works Confined Space Refresher** 

FF Full Turnout CPR

Wellness IST (x4) Varius Subjects

**US&R Apparatus Orientation** 

Residential Solar & Lithium Battery Operations

**BME Brush Orientation** 

#### **EMS Training**

Rescue Task Force (Paramedics Only)

**Mass Casualty Incidents** 

EMT / CPR Renewal

**Active Shooter Training** 

**Protocol Updates** 

**EMS Skills** 

Resuscitation

SIDS

HIPAA

#### **Promotional Exam Recruitment Processes**

Fire Battalion Chief Exam

Fire Engineer Exam



#### JoinCVFD Recruitment

**Recruitment Open Houses** 

Social Media Outreach



Chula Vista Fire Department Training Division



JoinCVFD



**Training Chief**Sean Lowery

**Training Captain**Charles Kuniyoshi

**Training Engineer**Robert Parkhill

**Training Program Specialist** 

**Grace Knepper** 

EMS Captain Tim Mehrer